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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,513	06/29/2001	Masamichi Murota	32301W180	2998

7590 09/25/2002
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WASHINGTON, DC 20036

EXAMINER

GRENDZYNSKI, MICHAEL E

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 09/25/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

Office Action Summary

Application No.

09/893,513

Applicant(s)

MUROTA ET AL.

Examiner

Michael E. Grendzynski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 1-9 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-2, drawn to an aqueous ceramic dispersion, classified in class 106, subclass 286.8.
 - II. Claims 3-6, drawn to an ink jet recording medium, classified in class 428, subclass 195.
 - III. Claims 7-9, drawn to a method of making an ink jet recording medium, classified in class 427, subclass 331.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as an anti-friction coating and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. It is important to note that the ceramic dispersion contains a solvent, whereas the coating in the medium does not contain the solvent (since it is a dry material); consequently, the dispersion loses its identity in the final product. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. Inventions II and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product can be made by another, materially different process, e.g., by applying the dispersion to a temporary carrier layer, drying it then transferring the dispersion coating to the recording surface.

4. Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the process can be used with another, materially different product, e.g., a dispersion not containing a nanoparticle ceramic dispersion.

5. Because these inventions are distinct for the reasons given above and the search required for Groups I and II is not required for Groups II or III, restriction for examination purposes as indicated is proper.

6. In the event the invention of Group I is chosen, this application contains claims directed to the following patentably distinct species of the claimed invention:

- a. An aqueous nanoparticle dispersion comprising a nanoparticle ceramic agglomerate (1) being dispersed in ionized water; (2) having an average diameter of 0.05 to 0.3 μm at a viscosity suitable for coating of 10 to 200 mPa·s as measured by a laser diffraction particle size distribution measurement apparatus; and (3) having a size

distribution curve such that the ratio of peak width at a height which is half the maximum height of said curve, determined according to the results of said measurement, to the maximum height is 0.7 or less (claim 1).

b. An ink jet recording medium having an ink-absorbing layer deposited on the surface thereof, wherein the ink-absorbing layer comprising a nanoparticle ceramic agglomerate having a size distribution curve according to FIG. 1 (claim 2).

7. In the event the invention of Group II is chosen, this application contains claims directed to the following patentably distinct species of the claimed invention:

c. An ink jet recording medium having an ink-absorbing layer deposited on the surface thereof, wherein the ink-absorbing layer comprising a nanoparticle ceramic agglomerate (1) being dispersed in ionized water; (2) having an average diameter of 0.05 to 0.3 μm at a viscosity suitable for coating of 10 to 200 mPa·s as measured by a laser diffraction particle size distribution measurement apparatus; and (3) having a size distribution curve such that the ratio of peak width at a height which is half the maximum height of said curve, determined according to the results of said measurement, to the maximum height is 0.7 or less (claims 3 and 5-6).

d. An ink jet recording medium having an ink-absorbing layer deposited on the surface thereof, wherein the ink-absorbing layer comprising a nanoparticle ceramic agglomerate having a size distribution curve according to FIG. 1 (claim 4).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

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Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or *clearly admit on the record that this is the case*. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, *the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention*.

8. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR 1.143).

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

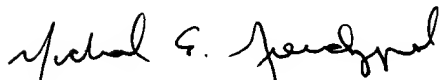
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Conclusion

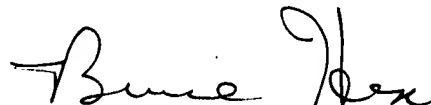
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael E. Grendzynski whose telephone number is 703-305-0593. The examiner can normally be reached on weekdays, from 9:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703-308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2351.



Michael E. Grendzynski
Assistant Examiner
September 15, 2002



BRUCE H. HESS
PRIMARY EXAMINER